AMENDMENTS TO THE CLAIMS

Claims 1-13 were filed originally.

Claims 1, 7, and 13 are canceled.

Claims 2-5 and 8-11 are amended.

Accordingly, claims 2-6 and 8-12 remain pending.

1. (Canceled)

2. (Currently Amended) The method of claim 1 3, wherein step (b) comprises the step of projecting a ray from the observation point that intersects the horizon and defines an area that is occluded from the observation point.

3. (Currently Amended) A method of determining portions of a surface within a space that are occluded from an observation point, comprising: The method of claim 1, further comprising the steps of:

(a) defining a horizon on the surface with reference to the observation point;

(b) identifying a region within the space that is beneath the horizon;

(c) determining the depth of the region identified in step (b); and

(d) disregarding the region identified in step (b) when the depth is less than a predetermined threshold.

4. (Currently Amended) The method of claim 1 3, further comprising the step of:

identifying a region within the space that is beyond the horizon.

5.   (Currently Amended) A method of determining portions of a surface within a space that are occluded from an observation point, comprising: ~~The method of claim 1, wherein step (a) comprises the step of~~

(a) defining a horizon on the surface with reference to the observation point by generating a plurality of coordinates, each of the coordinates including an azimuth angle, α, and a horizon elevation angle, θ; and

(b) identifying a region within the space that is beneath the horizon.

6.   (Original) The method of claim 5, wherein said generating step comprises, for each coordinate, the steps of:

(i) selecting α;

(ii) determining θ, so that a ray projected from the observation point at angles α and θ intersects an apex of the surface.

7.   (Canceled)

8.   (Currently Amended) The system of claim ~~7~~ 9, wherein said identifying means comprises means for projecting a ray from the observation point that intersects the horizon and defines an area that is occluded from the observation point.

9.   (Currently Amended) A system for determining portions of a surface in a space that are occluded from an observation point, comprising: ~~The system of claim 7, further comprising:~~

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means for defining a horizon on the surface with reference to the observation point;

means for identifying a region within the space that is beneath the horizon;

means for determining the depth of the region that is beneath the horizon;

and

means for disregarding the region that is beneath the horizon when the depth is less than a predetermined threshold.

10. (Currently Amended) The system of claim ~~7~~ 9, further comprising:

means for identifying a region within the space that is beyond the horizon.

11. (Currently Amended) A system for determining portions of a surface in a space that are occluded from an observation point, comprising: ~~The system of claim 7, wherein~~

means for defining a horizon on the surface with reference to the observation point, said defining means ~~comprises~~ comprising means for generating a plurality of coordinates, each of the coordinates including an azimuth angle, a, and a horizon elevation angle, θ; and

means for identifying a region within the space that is beneath the horizon.

12. (Original) The system of claim 11, wherein said generating means comprises, for each coordinate:

(i) means for selecting a;

(ii) means for determining θ, so that a ray projected from the observation point at angles a and θ intersects an apex of the surface.

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13. (Canceled)

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